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Patent
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Amendments to the Claims:

Claims 1-17 (cancelled).

Claim 18. (currently amended) A cooling system in an apparatus for forming three-dimensional objects, the cooling system removing heat from layers of a three-dimensional object formed in a layerwise manner from a build material selectively deposited from at least one orifice in a build chamber, the system being within and in fluid flow communication with the build chamber and comprising:

at least one fan for generating a flow of air through the build chamber;

at least one air duct having an inlet end and an exit end opening into the build chamber, the air duct being in communication with the fan for receiving the flow of air at the inlet end, the air duct shaping the flow of air into a uniform sheet of air flow and delivering the uniform sheet of air flow from the exit end across the layers of the three-dimensional object in the build chamber, said air duct has a protrusion on the exit end, the protrusion diverting the uniform sheet of air flow away from the air duct and towards the layers of the three-dimensional object.

Claim 19. (original) The cooling system of claim 18 wherein the air duct is curved so as to bend the air flow as it travels from the inlet end to the exit end of the air duct.

Claim 20. (original) The cooling system of claim 18 comprising a plurality of fans for generating the flow of air.

Claim 21. (original) The cooling system of claim 18 wherein the fan is selected from the group consisting of axial fans, centrifugal fans, mixed flow fans, and cross flow fans.

Claim 22. (cancelled).

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Claim 23. (currently amended) The cooling system of claim ~~22~~ 18 wherein the uniform sheet of air flow has a thickness and the air duct has a second protrusion upstream from the protrusion on the exit end of the air duct, the second protrusion widening the thickness of the uniform sheet of air flow adjacent the protrusion on the exit end of the air duct.

Claim 24. (currently amended) The cooling system of claim ~~22~~ 18 wherein the air duct has guide walls extending between the inlet end and exit end.

Claim 25. (currently amended) The cooling system of claim ~~22~~ 18 wherein the air duct comprises one containment wall in cooperation with the protrusion on the exit end for shaping the flow of air into the uniform sheet of air flow.

Claim 26. (original) The cooling system of claim 25 wherein the containment wall is substantially straight.

Claim 27. (original) The cooling system of claim 25 wherein the containment wall is curved so as to bend the air flow as it travels from the inlet end to the exit end of the air duct.

Claim 28. (original) The cooling system of claim 27 wherein the air flow is bent as it travels from the inlet end to the exit end of the air duct through an angle of about 90 degrees or less.

Claim 29. (original) The cooling system of claim 27 wherein the air flow is bent as it travels from the inlet end to the exit end of the air duct through an angle of greater than about 90 degrees.

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Claim 30. (original) The cooling system of claim 22 wherein the air duct comprises two containment walls in cooperation with the protrusion on the exit end for shaping the flow of air into the uniform sheet of air flow.

Claim 31. (original) The cooling system of claim 30 wherein the air duct has two exit ends and the containment walls form two uniform sheets of air flows delivered from the exit ends across the layers of the three-dimensional object.